

BIOS ENGINEERING

Intel Corporation, 5200 NE Elam Young Parkway Hillsboro, OR 97124-6497

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PRODUCT: D865PERL Standard BIOS

P21-0089 (Production 21, build 0089)

About This Release:

- 02-14-2005
- Core Baseline version 01.07.00
- RL86510A.86A.0089.P21.0502132202
- UNDI 4.1.16
- Tanacross UNDI 1.2.26

New Fixes/Features:

- Update latest processor patches.
- Update Tanacross UNDI to v1.2.26 to prevent a PXE failure with some EEPROM parts.
- Fixes system hang in Hardware monitoring page when USB Legacy disable with USB mouse connected.
- Updated system security by increasing length of supervisor and user passwords from 7 to 16 characters and moving the storage location of user and supervisor passwords out of system CMOS
- Added feature to enable VPD cloning for Intel(r) Integrator Toolkit.
- Fixed system hang when executing Intel(r) Integrator Toolkit in VM86 mode.
- Fixed PS/2 devices dropped if user press reset button during S1 sleep.
- Disable boot support for certain USB card readers.
- Fix for boot order being reordered when a USB drive is inserted and then removed while the Floppy Drive is set to Disabled.
- Added fix for memory allocation when using 4GB of system memory.
- Fixed issue where the USB 2.0 Legacy Support BIOS SETUP option was not visible in Intel(r) Integrator Toolkit.
- Fixed issue where certain PCMCIA card-readers do not function in Microsoft ®Windows.
- Fixed HCT Unreported I/O port failure on system without PS/2 devices.
- Fixed hang when entering S1 or S3 states while moving mouse rapidly.
- Fixed system hang when Int13 Function 48h called with no CDROM boot.

P20-0087 (Production 20, build 0087)

About This Release:

- 07-13-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0087.P20.0407131022
- UNDI 4.1.10
- Tanacross UNDI 1.2.10

New Fixes/Features:

• Ported latest AMI USB support and also fixed USB Card reader issue.

^{*} Other names and brands may be claimed as the property of others

P19-0085 (Production 19, build 0085)

About This Release:

- 06-28-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0085.P19.0406281350
- UNDI 4.1.10
- Tanacross UNDI 1.2.10

New Fixes/Features:

- Fixed POST issue with certain USB Card Readers.
- Fixed issue with Intel® Desktop Control Center and AGP/PCI Burn-in Mode set to nondefault value.

P18-0083 (Production 18, build 0083)

About This Release:

- 06-17-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0083.P18.0406171439
- UNDI 4.1.10
- Tanacross* UNDI 1.2.10

New Fixes/Features:

- Updated Intel® Desktop Control Center BIOS support
- Re-added the Intruder Setup option.
- Re-added Korean, Russian, and Simplified Chinese support.
- Updated Hyper Threading logo to still appear when Hibernate sleep state is cycled

P17-0078 (Production 17, build 0078)

About This Release:

- 05-28-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0078.P17.0405301738
- UNDI 4.1.10
- Tanacross UNDI 1.2.10

New Fixes/Features:

- Fixed issues encountered when using IFLASH and ITOOLKIT
- Fixed incompatibility with certain keyboards
- Fixed display of Intel ® Celeron ® Badge.

P16-0076 (Production 16, build 0076)

About This Release:

- 04-22-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0076.P16.0404221643
- UNDI 4.1.10
- Tanacross UNDI 1.2.10

New Fixes/Features:

• Banner change to P16-0076

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P15-0075 (Production 15, build 0075)

About This Release:

- 04-02-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0075.P15.0404021333
- UNDI 4.1.10
- Tanacross UNDI 1.2.10

New Fixes/Features:

- Added support for ATMEL, SST, and ST Micro 4Mb firmware hubs.
- Fix the Gigabit LAN SKU hang at "AA" issue during first boot at IFT.
- Updated System Configuration Data
- Updated support for Intel ® Pentium ® 4 Extreme Edition processors.
- Fixed an issue where the BIOS ID was incorrect in the ITK map file.

P14-0073 (Production 14, build 0073)

About This Release:

- 02-03-2004
- Core Baseline version 01.07.00
- RL86510A.86A.0073.P14.0402030948
- UNDI 4.1.10
- Gigabit LAN UNDI 1.2.10

New Fixes/Features:

- Updated ICH5R option ROM to Intel(R) RAID for SATA v3.5.0.3003.
- Fixed issue where a 'Disk Read Error Occurred' message was displayed after installing the Intel® Application Accelerator RAID Edition drivers, setting up RAID 0/RAID 1, and rebooting.
- Updated IDCC with T-Control Support.
- Fixed issue where memory timing values not being displayed correctly in AUTO mode on IDCC Terminal page.
- Updated ETK Version in SMBIOS to 1.01
- Fixed E7 hang issue at location of comparing BIOS image between BIOS image in FWH and the image copied in RAM buffer during POST.

P13-0071 (Production 13, build 0071)

About This Release:

- Core Baseline version 01.07.00
- RL86510A.86A.0071.P13.0401221036
- UNDI 4.1.10
- Gigabit LAN UNDI 1.2.10

New Fixes/Features:

- Added new support for Heceta 6 and SIO.
- Added enhancement for future processors.
- Updated System Configuration Data.
- Fixed an issue of delay in booting to Floppy with 2 SATA drives connected in native mode.
- Fixed an issue with the Intel SMBUS Driver which caused issues with using Intel Active Monitor.
- Fixed issue where system would not complete POST with no video card is installed and a LAN card is present.
- Fixed an issue with an OEM manufacturing tool reporting a CMOS checksum error.
- Fixed issue where the Hyper-Threading option does not appear in Intel(r) Integrator Toolkit.
- Suppressed POST error message when the Force CMOS defaults option is used for Flash update.

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• Added support for additional FWH flash parts.

P12-0069 (Production 12, build 0069)

About This Release:

- 10-23-2003
- Core Baseline version 01.05.01
- RL86510A.86A.0069.P12.0310231435
- UNDI 4.1.10
- LAN UNDI 1.2.10

New Fixes/Features:

- Additional IDCC support added.
- Fixed an issue where system will not boot to PXE when third party 256 MB AGP card is present.
- Added L3 cache info to SMBIOS table.
- Added logo support for unreleased processors.
- Displayed L3 Cache option in BIOS setup if a processor with L3 Cache is in use.
- Fixed issue where loading CMOS defaults outside of BIOS SETUP would reset memory timing override questions to invalid values.
- Corrected spelling error for IRQ Help text in BIOS setup.
- Fixed intermittent false memory timing error that occurs after flash updating a VPD
- Fixed intermittent failure to update VPD only Flash5 capsule.
- Fixed issue where system would not log event log errors.
- Fixed issue of unused PCI clocks not being turned off.
- Updated default Fan control settings
- Added IDCC Memory Extended Configuration information.
- Fixed a system hang problem during POST with a Flash USB Flash card reader/writer.

P11-0066 (Production 11, build 0066)

About This Release:

- 09-18-2003
- Core Baseline version 01.05.01
- RL86510A.86A.0066.P11.0309181611
- UNDI 4.1.10
- LAN UNDI 1.2.10

New Fixes/Features:

- Added IDCC Memory Extended Configuration information.
- Fixed the Blue Screen issue seen after a certain amounts of OS resets.
- Updated 865G/865PE Memory reference code to version 1.4.
- Updated processor branding info.
- Changed display of DDR333 to DDR320 when used with a 800 Mhz FSB processor.
- Added IDCC fan information.
- Added enhancement to flash update algorithm by validating BIOS image and check for memory stability.
- Corrected language translation issues.

P09-0061 (Production 09, build 0061)

About This Release:

- 08-28-2003
- Core Baseline version 01.05.01
- RL86510A.86A.0061.P09.0308281850
- UNDI 4.1.10

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New Fixes/Features:

- Added latest processor support.
- Fixed issue where if IFLASH issue that would cause system to hang at POST code 55h.
- Fix issue where system will POST hang at 00h after setting manufacturing jumper due to VID been cleared to 00h.
- Added support for multiple capsules and split/fragmented capsules
- Fixed issue where event log fails to clear on a reboot using a CMOS utility
- Added support for future processors.
- Added limited IDCC support.
- Fixed a system hang problem during POST with a Flash USB Flash card reader/writer.

P08-0058 (Production 08, build 0058)

About This Release:

- Core Baseline version 01.05.01
- RL86510A.86A.0058.P08.0307151556
- UNDI 4.1.10
- LAN UNDI 1.2.10

New Fixes/Features:

- Updated Intel(R) RAID Option ROM to version v3.5.0.2568.
- Enhanced flash update algorithm to fix post code E9 hang issue.
- Intel® 865G\P\PE\GV and Intel® 848P (Springdale) MCH BIOS Specification Update v1.4 & Memory Initialization Reference Code v1.3.
- Updated System Configuration Data.
- Added ASF Support
- Added codes to remove Intel(R) RAID Technology setup option if IDE is not in Enhanced mode.
- Added work-around for IRQ sharing issue with a 3rd party drive image application in SATA native mode.
- Added the ability to enable center spread clocking via BIOS set up option.
- Added functionality to flash update the BIOS without having to reboot
- Added error handling, Flash5 failed message during POST
- Added increasing scale of beep tones when flash update is in progress.
- Added a workaround for a synthetic memory test utility that hangs when USB legacy support is enabled.
- Fixed an issue that caused a delay when booting to a floppy after attempting to boot to a non-bootable CD with two SATA drives attached.
- Fixed an issue where the Event Log could not be cleared by setting a CMOS token.

P07-0056 (Production 07, build 0056)

About This Release:

- Core Baseline version 01.03.00
- RL86510A.86A.0056.P07.0305201221
- UNDI 4.1.10
- LAN UNDI 1.2.10

New Fixes/Features:

- Added CORE support for manual PCI IRQ routing.
- Lowered power consumption of Gigabit LAN when system is in S5.
- Fixed the issue, where some boards hanging at POST code 20h when CMOS battery is reinstalled or at first power-up.
- Fixed boot block recovery failure during BIOS flash update with HT processor.

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- Fixed issue where Windows XP legacy-to-native IDE runtime mode switching was not functioning.
- Added CKE workaround for enhanced S3 robustness.
- Correct fan monitoring text and fan speed RPM display.
- Added Audio progress indicator for BIOS updates. An increasing scale of beep tones are now emitted during BIOS updates.

P06-0052 (Production 06, build 0052)

About This Release:

- 05-02-2003
- Core Baseline version 01.03.00
- RL86510A.86A.0052.P06.0305020834
- UNDI 4.1.10
- Intel® 82547EI UNDI 1.2.10

New Fixes/Features:

- Fixed BIOS Hardware Health Monitor fan speed display.
- Capitalized RAID in the RAID setup option.
- Add "Additional System Information" in BIOS Setup Menu.
- Added Grayscale JPEG image support. Also added more robust error handling in JPEG decoder.
- Added processor support.
- Fix for the Backup block string being intact when the power fails during the middle of an erase cycle.
- Fixed boot to USB Zip media when USB Zip was emulated as Floppy and the actual format of Zip media was HDD.
- Added codes to hide Intel(R) RAID Technology setup option if ICH5-R is not present.

P05-0050 (Production 05, build 0050)

About This Release:

- 04-22-2003
- Core Baseline version 01.03.00
- RL86510A.86A.0048.P04.0304091908
- UNDI 4.1.10
- Intel® 82547EI UNDI 1.2.10

New Fixes/Features:

- Banner change to P05-0050
- Updated BIOS support code for Intel® Pentium® 4 processor with 800MHz system bus.
- Updated DPSD small Logo.
- Fixed false memory test post time error message when no failures and when dual channel optimization message needs to appear.
- Fixed WOL from S5 issue with Intel® 82547EI LAN.
- Added support for SKU with Intel Flex-6 audio and 10/100 Mbit/sec LAN subsystem.
- Fixed intermittent hang at post 2A issue and fixed LAN disable issue on some SKUs.
- Added support for Express BIOS Update 2.0.
- Fixed the problem where runtime GPNV Logo enable/disable feature.
- Added Adobe* Photoshop* JPEG image support and Microsoft* Windows* XP sample JPEG image support.
- Fixed issue where when the floppy disabled in Setup the system still booted to the floppy after exiting/escaping the BBS Popup Menu.
- Corrected ACPI S4 Sleep Type register value.
- Updated new System Configuration data

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P04-0048 (Production 04, build 0048)

About This Release:

- 04-10-2003
- Core Baseline version 01.03.00
- RL86510A.86A.0048.P04.0304091908
- UNDI 4.1.10
- Intel® 82547EI UNDI 1.2.10

New Fixes/Features:

• Initial Production Release

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